

What Is Claimed Is:

1 1. A direct backlight module comprising:
2 a first plate;
3 a second plate connected to the first plate forming a space
4 between;
5 a plurality of light sources disposed in the space; and
6 a third plate with a plurality of openings disposed outside
7 the space connected to the surface of the first plate.

1 2. The backlight module as claimed in claim 1, wherein
2 the first plate comprises:
3 a plurality of protrusions; and
4 a plurality of recesses, wherein the plurality of
5 protrusions and recesses are alternately
6 arranged, and the plurality of light sources are
7 disposed in the plurality of recesses.

1 3. The backlight module as claimed in claim 2, wherein
2 the plurality of openings are disposed corresponding to the
3 plurality of protrusions and form a plurality of channels.

1 4. The backlight module as claimed in claim 3, wherein
2 the third plate comprises a plurality of flexible portions
3 respectively connected to the sides of the channels.

1 5. The backlight module as claimed in claim 3, further
2 comprising an enforced heat dissipation device.

1 6. The backlight module as claimed in claim 5, wherein
2 the enforced heat dissipation device is a fan.

1 7. The backlight module as claimed in claim 2, wherein
2 the height of each protrusion is lower than the center line of
3 the light sources near the protrusion.

1 8. The backlight module as claimed in claim 2, wherein
2 the cross-section of the plurality of protrusions and recesses
3 is trapezoidal-shaped.

1 9. The backlight module as claimed in claim 2, wherein
2 the cross-section of the plurality of protrusions and recesses
3 is triangular-shaped.

1 10. The backlight module as claimed in claim 1, wherein
2 the first plate is a reflector plate.

1 11. The backlight module as claimed in claim 1, wherein
2 the second plate is a diffusion plate.

1 12. The backlight module as claimed in claim 1, wherein
2 the third plate is a metal plate.

1 13. The backlight module as claimed in claim 1, wherein
2 the plurality of light sources are lamps.

1 14. The backlight module as claimed in claim 1, further
2 comprising:
3 a first diffuser disposed on the second plate;
4 a prism disposed on the first diffuser; and
5 a second diffuser disposed on the prism.